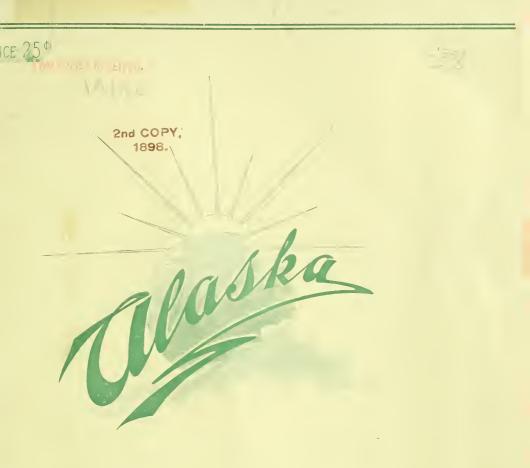
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## IT'S WATERS, LAND AND LIFE

BY JOHN E. BENNETT

THE MYSELL-ROLLIN'S CO., PUBLISHERS, S.F. CAL







Yours very truly John & Bermett.

# ALASKA

# ITS WATERS. LAND AND LIFE

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An Illustrated Lecture

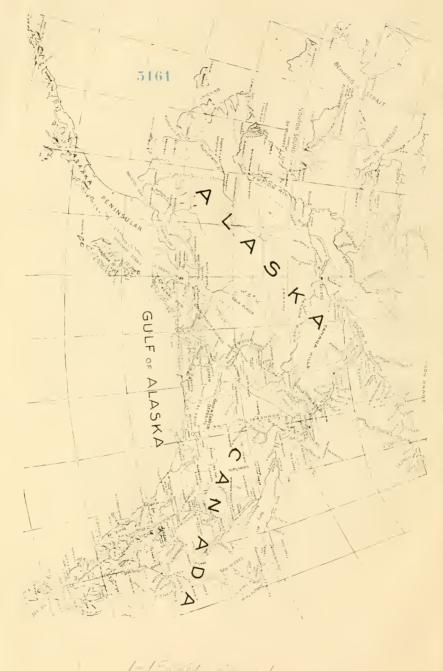
JOHN E. BENNETT





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#### The Alexandrian Archipelago

AND THE ....

#### Alaskan Peninsula.



CANNOT remember the name of that special agent, who suggested to the Forty-first Congress that Alaska be abandoned by the United States upon the ground that it was an unprofitable investment, but whoever he was I will hazard the opinion that, at the time of writing his teport, he had never made a tour through the "inner passage." That he had never steamed among the islands and canals which fringe the coast from Dixon's Entrance, two hundred miles to the St. Elias Range, and thence with a stretch of sea and a northward curve on to Prince William Sound and the Kenai

Peninsula. That he had never been thrilled by the experience of such a journey I will warrant, for if he had known such, it passes reason to imagine that he could ever have recommended our parting with what he could not but have recognized will, in time, become popularized as the grandest scenic region of the world.

For as far as do the colors and fretwork of a California sunset lie beyond the powers of detailed reproduction by the artist, so do the scenic marvels of these isles and channels surpass the limit of descriptive narrative. From the time that you enter Clarence Strait until you move through Cross Sound again into the North Pacific, you are encompassed by a swiftly changing panorama of surprises. Your first sensations will be that you have strangely stepped off the ocean and are making a journey through inland waters that are not related to the sea. For the fresh scent in the cold, damp air is not the dor of brine, and this commingling with the agreeable exhalations of the forests which clothe the mountains upon your either hand, makes you feel that you are winding amongst a a mesh of rivers in some semi-frigid interior.

As you move along the intricate ways, some of them scarcely two ships' length from bank to bank, you note that few of the islands have beaches, and that most of them rise abruptly out of the water and carry their dark green foliage boldly up to the line of snow. It is one hundred and fifty miles from the open sea to the farthest reach of tide water, but from many positions, as you pass along, you may have in plain sight the high, snow-whitened eminences of the Coast Range of mountains. Indeed, these gloomy verdured cones, standing here and there about you, environing you with their stalwart forms, seem but water-set foothills to those loftier, steeper, more broken elevations. Very often an overhanging fog obscures your vision to all but your close surroundings, and perhaps an almost ever present rain may fill the air. It may drizzle freely, or it may pour in such copious torrents as shall remind you of those old days of the ark, when the windows of heaven were opened; but there will come days when the warm sunshine will bathe the scene with an effulgence of gold and silver, when the green of the forests will be livened with a lighter hue, when the cataracts plunging in broken lines of foam down the sides of the island mountains shall mark the olive with a purer white, when the whole of nature shall seem to awaken with a calm spirit and reflect a smile that has been suppressed and concealed.

It is pleasant at such a time to steam up the Gastineaux Channel and pause in front of the wharf at Juneau. This is a town of peaked and lumber houses which spreads along the



shore for a while. then mounts over the back of a little rise and lies still at the foot of a great green mountain which rears like a scowling giant behind it. It is a mining town, of about 2500 souls, and bears the name of a French halfbreed who in 1880 was grub-staked at Sitka to come here and prospect for gold. He discovered a placer district close to the town-site and took from its ad-

jacent veins 960 pounds of gold ore, worth \$14,000. He found also the great mountain of gold quartz on Douglass Island, two and a half miles across the channel. This he sold to John Treadwell for \$150. The operators of that mine now clear an annual dividend of over half a million dollars.

Joseph, I may remark, has no money now, and when I was last in Alaska he was preparing for a foray into the Yukon country, intent upon another test of that phenomenal luck which has so fav-

ored him in the past.

Leaving Juneau, we round Douglas Island and traversing the various channels get at last into Icy Strait. As we move thus we pass bays which bow their wide curves inland, and the sun shines within them white against their innumerable floes of ice. And afar over to the yon side of such a bay we observe a line of pearly,



Mountain Range of Iron on Chilkat River.



Side View of the Davidson Glacier.

glistening cliffs which rise two hundred feet from the water's edge; and if we near them we shall discover this high, broad face to be of ice, generally opaque, but sometimes of transparent, irridescent blue, scintillating with the sun, and fantastically carved, gouged into innumerable designs of protrusion and depression, many of great size, some highly architectural, ornate. These are the results of the meltings and nneven fractures of a glacier that is moving at a rate of sixty feet per day towards the sea; and as we pause we may hear the crash and thunderings, heavy, like some long drawn cannonade, of the ice boulders breaking away from the glacier and falling into the bay, there to float upon the surface and become bergs.



Top of Muir Glacier.

As we steam away the loug reach of the glacier lying in its mountain ravine becomes apparent. Farther than the eye can reach, for twenty-five uiles or more, it extends into the range, and from time to time in white and giant arms, it reaches up and takes the ice from connecting canyons. These transverse ice rivers are called Alpine glaciers, and the most perfect one is the Davidson Glacier, at the head of Chilkat Inlet, discovered by Prof. George Davidson in 1868. The surface of all of these glaciers presents a strangely convoluted

aspect, due to the uneven meltings of the ice, and many of them are crevassed with wide breaks hundreds of feet indepth. But the Alpine glaciers do not always advance upon the sea. Often they merge into a great ice lake which forms at their foot and becomes another glacier called a



Spruce Forest Killed by the Yahtsee River en route to the Ocean.

Piedmont glacier. The largest of these latter is the Malaspina, fronting the ocean near the St. Elias range with a face of ice one hundred and fifty feet high and fifty miles in length. The Alpines making into it are radiant with rainbow hues and wonderful in their



A Jungle of Vegetation on the Top of the Malaspina Glacier.

phenomenal colorings. One long ice mound will be pink, another purple, and a third a diamond blue. Every gulch in the range bears one, and in a reach of thirty miles of mountains, there are no less than sixty-one of these strange ice bodies.

But the most remarkable of all the curious features in relation to this glacier, more remarkable it has seemed to me than that luxuriance of spikenards, shrubs and ferns which grows upon its surface, is that preat tunnel at the base of the glacier, out of which there rushes the Yahtsee River. It is the accumulated meltings and seepage of the vast ice field that finds its exit here, and it has borne with it millions of tons of detritus from the upper zone, which it has subsequently deposited and with it killed and nearly buried a great forest of spruce which lay before it on its route to the ocean. We steam past Sitka, the seat of the government of Alaska under past and present regimes and observe it to be a pleasant town of about 1200, half of whom are natives. As we proceed northwesterly along the line of the coast the grand and imposing form of Mount St. Elias looms in sight, its summit draped in fog, its shoulders epauletted with snow. It is 18,024 feet high, next highest to Mount Logan, which stands behind it and which is the loftiest height of land in North America.

Proceeding westerly we shall pass the very marshy delta of the Copper River, the mainland forested with spruce and overhung by sombre



mountains, every rift in the ragged shore line being filled with shimmeri: g glaciers. The Copper is a swift and torthous stream, filled with rapids and wholly nunavigable. Copper deposits are abundant upon it, and gold is claimed to have been found upon several of its northern bends, though I have never seen such. Many expeditions have been fitted out in San Francisco this year for gold prospecting on this river, and some hope to find their way through its Valdez Pass, over an alleged Indiau trail, by what is asserted to be the shortest route to the Klondike country.

The Kenai Peninsula is father west and were it not for twelve miles of a "dead" or motionless glacier, which connects it with the mainland, it would be an enormous island. A few streams make from its mountainous interior into the surrounding waters and along most of these prospectors have traversed and found gold. The streams however, afford the only pathways to the interior, and on the Kenai, as on the islands of the archipelago, the surface is not alone wooded with spruce trees from 70 to 80 feet high, with hemlock, red cedar, willow and birch, but there is an undergrowth of brush so dense as to be impenetrable. Besides this, there is a species of spiny cactus called "devil club," with fronds sometimes eight feet in length, which grows among the brush and gives briars to the tangle. The only trails through this confusion of vegetation are made by the brown



The Village of Kadiak.



The House of Klu Klux, Chilkat Chief, Who Burned Fort Selkirk in 1852.

attaining at the flood a height of over thirty feet.

As we move south out of Cook Inlet and along the shores of that singular trend of islands which under the name of the Alaskan Peninsula reaches eight hundred miles into the Pacific Ocean, we may look behind us and over the moraines and amidst the snow, catch a glimpse of the smoking craters of Iliamna and Redoubt, twin volcanoes, burning away on the mainland.

We proceed, passing the group of Kadiak Islands, ten in all, with Kadiak and its five hundred whites and creoles, or black bears coming down to the water's edge to strike salmon out of the streams with their paws, for these bears live mostly upon fish. A region so beset with obstructions to progress and perils to life is not inviting to the prospector, which explains why few of these areas have been explored.

On the west, between the peninsula and the mainlaud, there is Cook Inlet, a great reach of the sea which extends away up to the glacier. My schooner lay on the muddy bottom in this inlet when the tide was out, but in a little while it came boiling in, running at a rate of nine or ten miles an hour,



Unga Harbor.



A Mummy from Kagmil.

comprising its largest town. Nearly every family there has a garden, given to succulent vegetation, rare enough, indeed, in Alaska. There are Thlingit natives there, too, remarkable for their taste for designing upon wood; their totem poles, carved trees, erected in front of their dwellings, being symbolic of their families in the tribe.

On several of the Kadiaks there are ranches for the raising of fur foxes, silver, black, blne and red. But we are moving along the peninsula, and we pause among the brown and hilly islands of the Shumagins, entering Unga Harbor, which curves into a green hilly island of that name. It was famed in the old days for the sea otters which splashed in its caves, and it became a center for the sale of their pelts; but the otters are gone now and in the vaults of the four mountains, Kagmil, and the rest, repose the dried carcasses of their Aleut despoilers, gone upon a long journey, whither the otter has disappeared. THE SENDIG SEAN WEFFICIEN USEDN

HEN we reach Unalaska we leave behind us all that vast region of water and mountain islands comprised under the names of the Gulf of Alaska and the Alexandrian Archipalago. Only a cursory glance, under a full head or steam and at full speed, has herein been possible to us, yet it is in area and variety of life and climate nigh a world unto itself. No feature of it is more remarkable than the excessive precipitation which almost throughout the year visits this district. It lies upon the northern arm of the Kuro Siwa, the great Japanese warm current. Following its trend come the heavy-

moisture-ladened clouds, low lagging close to the water's breast. They are forced upwards into cold heights by these towering mountains and there the vapors are condensed and rain pours down the slopes of the islands and the coast inclines of the mountains of the main land. These thickly grown forests and this rank vegetation is all a product of this rain. And yet the temperature is equitable. At Sitka the mean annual record of the thermometer is sixty-two degrees, about the same as at Washington City, yet the rain fall has been 103 inches in one year. Rain, fog, dark forests broken by contrasts of clear white glacier ice, high mountains, rugged and thrilling scenery, often agitated and made wild by the fury of some mighty storm, such features linger with us as a recollection while we move into Dutch Harbor, a part of the spacious bay which lies in the arms of Unalaska Island. An old volcano, called Mount Makushin, which occasionally indulges a smoke, rises about 6000 feet upon the northwestern interior of this island, and the other hills are steps to it, sometimes leaving a straggling, ragged piece of land in the sea, which forms the indentations for little bays. Farther east, on Unimak, lies Shishalden, puffing steam from its mouth 9000 feet in the sky; and farther on rears quiet Pavlof its crater stuffed with yellow sulphur.

About two-thirds of the buildings in the town of Unalaska are owned by the Alaska Commercial



Snap Shot at Cannery Salmon.



Killing Seals on St. George's Island

Company, which has, until the recent appearance of a competing concern, controlled nearly all the trade. It is a coaling station for vessels going into Bering Sea, and hundreds of craft stop there during the open season. The town contains only about 400 persons, and of these many of the natives are absent much of the year engaged in hunting otter.

The salmon cauning industry is chief among the enterprises which engage the people on the peninsula, as it is the important occupa-

tion of the inhabitants of the entire of Southeastern Alaska. There are thirty-two canneries in all in Alaska, and their annual pack is about fifty million pounds. Alaska waters comprise, indeed, a vast lake of fish. It has twenty-six thousand miles of cod banks, greater and richer than those of Newfoundland, and existing through the same natural causes as do those of Newfoundland. For as they are upon the line where the warm waters of the Gulf Stream meet the cold ocean of the north, so are these upon the Arctic rim of the Kuro Siwa. Codfishing will be in time one of the greatest industries on the Northwest coast. The fish is precisely the same as that of the Atlantic, and the total catch in one year has been as high as 1,274 tons, worth \$24,500.

The demand for, and great abundance of, salmon has turned the attention of the packers to this fish. During the running season all streams are alive with them and they may be scooped out with dip nets. I have, standing in the stream, caught them one in each hand by the tails and so lifted them wriggling out of the water. The largest, fattest salmon are those of the Vukon. There they attain a weight of one-hundred and twenty pounds, and four of them will fill a barrel.

Moving through Dutch Harbor we come into Bering Sea, which stretches north to where the head lands of Cape Prince of Wales pinch the waters against the coast of Siberia, form Bering Strait, and so define the southern limits of the Polar ocean. We shall sight the Pribilof or Seal Islands as we pass, the islands on which are the breeding rookeries and hauling grounds of the fur seals. The right to take seals is leased by the government to the North American Commercial Company and it may take roo,000

per year. Only the young seals, or bachelors, are killed, and they are driven about ten miles inland, there dispatched with clubs, the carcasses comprising the chief subsistence of the alert natives of the islands. Indiscriminate pelagic sealing by foreign vessels shooting seal in the ocean while moving to and from their feeding grounds on the edge of the warm current, has so greatly reduced the number of the animals that the attempt on part of the government to suppress these attacks upon seal life has long since become a diplomatic question.

As we move eastward to the shore of the mainland in Bering Sea we begin



Kuskwogmuits, Native Women, of the Kuskokwim River District.



A Herd of Reindeer at Teller Station, Eskimo Houses in the Distance.

to accumulate evidences of the fact that we are drawing into Arctic Alaska. Occasional slabs of floating sheet ice, which have drifted down from the ocean suggest this, and when we reach the mouth of the Kuskokwim river and find the natives living on the blubbers of the walrus and beluga whale, on salmon, black and blue berries soaked in seal oil and packed in bladders, on carrion salmon buried in the frozen ground, when we see such things the fact is further impressed upon us.

The whalers, searching the seas for the baleen of the cetacean and for the ivory of the walrus, have well nigh ridded the northern waters of these species. And as the numbers of these have been depleted the food supply of the natives has accordingly decreased. Starvation has more than once visited the slothful, harmless Eskimo who inhabit the bleak slopes of the Bering Sea, and the total disappearance of the aboriginal Alaskan would necessarily follow

the passing of the creatures of his subsistence. Accordingly, the government has purchased from the Chuckchees, on the Siberian side, a number of domestic reindeer, with the view of making the Eskimo, as are the Siberians, herders of this animal. Twelve hundred of them have been imported into Alaska, and have there been distributed to the various missions whose



Taking Reindeer on Shipboard at Siberia.



children are taught to attend them. The government, however, maintains the principal station in its own charge. The reindeer is peculiarly adapted to the climate of Alaska, in that it eats moss with which the whole of the interior region is covered; cold and snow have no effect upon it, and its fur is the warmest and most desirable of Arctic clothing. It

Station at Point Barrow.

Vessels Frozen in the Arctic Ocean.

is a fleet draught beast, but it cannot bear a pack except upon its shoulders. Its flesh is a delicacy, the milk is creamy and nutritious, but bitter and will not churn into butter.

From Teller Reindeer Station at Port Clarence, to Point Barrow at land's end on the north, the coast is barren, desolate and wild. Nothing but whales are there in this polar ocean to attract vessels, but in pursuit of these, ships will penetrate the distance far into the latitudes of Herald Island. Whole fleets are sometimes caught in the

ice there. The vessels sail into the sloughs formed by the gap between the shore ice and the sea ice. There comes a time in the fall when the sea pack starts to move down upon the ice along the shore and to close the gap. It is in these jaws that ships are seized, are crushed, masticated into splintery boluses and swallowed into the polar maw. At the time in which I write there is en route an expedition sent by the government to rescue a fleet of seven whalers cemented yonder in the frozen sea. Very terrible affairs are these freezes, for rarely are the vessels saved, and too often the crews also perish. The miles of ice between them and the shore piled mountains high are almost impassable; and the shore itself is desolate and comfortless. The whaler has the option of starving aboard or on land. When spring comes and the ice begins to move, the ships are carried far to the north and east, in direction of the pole, where they are ultimately crushed and destroyed. A number of vessels and men have been lost in this way, and it was with a hope of saving the lives at least that the government converted the



Cogmullik Esquimo Wearing Labrets.

meteorological observatory at Point Barrow into a store house in which there is maintained a year's provisions for at least four ships' crews.

The vessels which I show in the picture, however, are not caught in the ice. They are at anchor in the harbor at Herschel Island and will safely pass the winter. There is another harbor in this region, it is at the mouth of the Mackenzie river, the great Nile of the north. But other than in these havens there is small chance amidst the Arctic ice for a vessel once seized ever again to be released, and at all events it is best that ships should



Whaling Vessel Trying Out Oil.

seek the south rather than attempt to pass the closed season in these latitudes.

Though desolate indeed, yet this wild arctic Alaska is not without wonders and even charms. I know a vast area of plain within it, where the snow never lies; it melts as fast as it falls, and the surface of the ground is warm. About eighty miles north from the northern coast and midway the territory there is a great lake of bitumen, very similar to that lake at Trinidad. South and east of this there is another singular lake, this latter of petroleum oil. It is ten miles long and seven miles wide, and the oil seeps into it from springs in the adjacent low hills. The depth has never been sounded, but tests of the fluid upon the surface show it to be a high grade petroleum; and all around this lake for fifty miles there are vast deposits of coal. It is lignite, burns to a clean white ash, but it does not coke.

Immense deposits of coal are also found at Cape Lisburne, about midway between the Bering Strait and Point Barrow, and it is in this district, growing out of the coal seams and upon the ice that, in the early spring before the ice cakes are melted, the most delicate flowers can in abundance be found. Saxifrage, dandelion, violets, grow amongst the vivid orange and reds of the lichens and the moss, while the white blossoms of the stunted willows are greedily devoured by the coveys of grouse which feed upon them.

The flowers give a smiling contrast to the cheerless face of that broad and boundless



Point Barrow Eskimo-one woman and three]men.

landscape, destitute of beauty save these tender touches of color. But different is it with the Arctic sea. In its cold immensity a pale glory diffuses the aspect. We see an infinite distance of snowy surface, which you know to be ice, resting upon the water a score of feet thick ; an endless field of ice, solid as the floor of earth. And close beside you there are ice eminences jagged into pointed peaks and sharp angles, as different from the glacier ice as though the materials were unlike. They stand there, these rigid things, product of some past years' jam, and off yonder upon the wide sheet there



Flowers Growing on the Ice at Cape Lisburne.

are more, and more beyond them, so that you might fancy you were upon an enormous plain broken by craggy rocks. But, sometimes even here there are hours of warmth and geniality. In those periods the blue ocean, floating its Victoria Regias of chalky

ice, shall seem sensuous and serene beneath the high warm sun, when even the broken barrier of the Siberian rock coast shall have a softened feeling in its undulating lines, and when polar nature is relaxed and mild.

It is in this brief season, that not only the flowers blossom, as I have said, but edible vegetation may be cultivated. In a region where wild strawberries pave the earth with their succulent fruit, where the big salmon berry is so abundant that it is an important diet of bears, where you may walk through miles of large, luscious huckleberries, pendant from their stout, tough bushes, that such a country, yielding in abundance the spontaneous sweets of nature, should yet be incapable of responding to the toil of the agriculturist is not reasonable to suppose. Though above the Arctic circle the conditions are less favorable than below it, yet, radishes and lettuce have been grown at Point Barrow and at Kozerevsky and Nulato, on the Yukon, the Catholic fathers have thriving gardens of potatoes, cabbages and turnips, while barley thrives in the fields and cows are successfully herded.

But this season is short, and soon again snow covers the earth, and the long winter night once more enshrouds the country. Then when the sun has gone and the gloom is deep the heavens will be lit by a singular demonstration. Flickering light starts shooting in spear points from behind a broad low bank of clouds which limn the horizon. It dances there a moment, serrated and restless, as though it were the effluence of a boil ng sea beneath. Then suddenly it springs upward and darts toward the zenith in grand, in gorgeous bars of light. The low dark curtain has yielded its effulgence of glory and the heavens are ablaze with a marvelous illumination. For a moment it scintillates, beaming in its colors, violet and gold, green, purple and red, then the bars gather their ends in the highest heavens, draw into a corona above your head. As you gaze the lambent circle contracts into a radient nimbus. A silent explosion follows, and then the materials of the display, falling, disappear in a coruscating shower, which might seem to be a blessing of the Divine upon you, lone observer of this celestial spectacular.



Summer Scene on the Coast of Siberia.

#### The High Kotusks

....AND THE

#### Waters of the Lewis-Yukon.



HIS vast region of the far north has had always a kind of grim interest for me; that wide empire of mossgrown, undulating, tenantless plain, stretching away for thousands of square miles behind the bare cold coast which fronts the sea; the great ocean of dark quiet water contrasting with the white splotches of floating ice, and beyond, the endless expanse of frozen sea, still and white, broken by bergs and cliffs, spreading away to the pole—these are memories ineradicable from the mind which has once

beheld them. Our course now lies toward the interior of Alaska, however, and to reach this, the most traversable highway is the great Yukon, which, rising in the mountains guarding the southeast coast, makes a great curve, analogous to the shape of the shore, and, after flowing over 2,200 miles, joins the waters of the Bering Sea.

The short rivers on the coast are mostly swift and uunavigable, but the Yukon can be followed in boats from the foot of the Kotusks to St. Michaels, and small steamers can ascend it for over 1,600 miles, as far as its only impediment to navigation, the White Horse Rapids.

Passing Juneau, we enter the Lynn Canal, au arm of the sea nearly sixty miles wide, and steaming almost north, we leave the Chilkat ou the left, and passing the peculiar peninsula and its straggling islands which separate the two tines of the fluid fork, we follow the Chilkoot Iulet to its source; and here at Dyea, upon a little flat at the foot of a big bluff of a mountain we debouch. Skagway lies about six miles to the east and is a great cluster of tents pitched mostly in a swamp along the Skagway River at the mouth of White Pass. That pass is about 1000 feet lower than the Tyia (*i. c.*, to pack) or Chilcoot Pass, and is altogether within the timber line. The road is on an easy incline and horses may readily travel over it. By reason, however, of the almost incessant rains, the way is muddy and slippery, and the short portion of the road which has been corduroyed offers slight facilities for travel.

At Skagway and Dyea, all is tumult and confusion. Log and timber shacks, in which merchandising is conducted and saloons with gambling tables are kept, and tents galore with provisions stacked in canvas sacks, many of them standing out in the rain, an idle population in groups about the towns, waiting to perfect arrangements for starting over the passes, these are the scenes which crowd upon one making a casual survey of both places

And all along the six miles up Dyea River men, and even women with little children, are pressing their way, the men towing boats loaded with provisions, the women trudging along dragging their babies by the hands. We enter the canyon where the trail becomes rough and starts to rise. From thence on it crosses streams or marshes, is strewn with



bowlders and is at times broken and steep. Several little camps are upon the way-side. Sheep Camp, famed amongst the Chilkoots as the spot where many mountain sheep were killed, is 1,200 feet above tidewater and has several frame buildings where you may get a rough meal for a dollar and sleep under shelter for a dollar and a half. Stone House, at the end of the

Dyea from the River



Along the Course of the Dyea River.

timber line, is two miles further on over a steepand muddy trail, and is the next camping place. It is a big jutting of rock on the mountain affording a sort of cove shelter from the strong sea winds which strike with their full force against

the mountain's face. The trail is somewhat easier for the next two miles at the end of which the camping place called the Scales is reached; here it was that the packers used to weigh their packs, which they carried over the pass for hire, charging ten cents per pound of burden. The rush of Klondikers has raised this price very much, and I have known as high as forty cents per pound to be charged. The packing has heretofore been done solely by the Chilkat and Chilkoot Indians and, until recently, these Indians exclusively have held the right to cross the passes; the Chilkats so holding their pass at the head of the river of that name, and the Chilkoots likewise maintaining theirs. This was done because of a monopoly of trade claimed by these Indians with the interior natives between whom exchange of products of the sea for land furs was conducted during the spring and summer seasons. Lately, however, the Indians have found more profit in carrying the packs of whites going over the trails, than in trading with the interior Sticks, and they

have abandoned their heretofore self asserted and extensive privileges in the mercantile line.

At the Scales, we are at the base of that obtuse angle formed by the precipitous rise of the final mile of the trail, before the summit is reached. We have been ascending along the bottom of a ravine with high hills on either hand; now the way presents a bolder, broader aspect, and at times it is nearly perpendicular. Horses, however, have been gotten over this rise, bearing their burdeus to its foot,



Last of the Even Trail Before Entering Dyea Canyon.

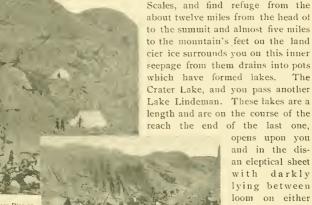
then being unloaded and gotten over light, the packs carried up by men who put them on the horse at the summit, from whence there is an easy grade down to the chain of lakes.

In the early eighties, when Schwatka made his famous trip over this pass and along the Lewis-Yukon, the "forcing of the mountains" was considered a remarkable feat. But really there is nothing extraordinary about it. I have travesed many routes and passes in the Sierra Nevadas and the Montaua Rockies that were far more difficult than is any pass in the Kotusks. The only perilous feature about the latter occurs in the winter season when the mountains are visited by frequent and terrible blizzards, in which one, if caught on or near the summit, may be frozen to death. But he is very foolish to suffer thus if he be so caught, for he may retreat, wherever he is, and camp. If he is on the inner side, a

short run back shelter, and if he roll down to the storm. It is the Dyea River from the summit side. Blue glaside, and the along the slope first of these is before you reach mile or more in trail. When you Lake Lindeman through a vista tance you behold of blue crystal wooded shores mountains that hand. This lake long and per-

The Steep Rise on the Chilkoot.

It is calm in summer, though over it out of the passes. get a grip sufficiently strong to ruffle them until the long Bennett is reached, when the strong that the surface is motion dangerous to boats. of slender spruce and pine





Arriving at Crater Lake, across the Summit-

reach the end of the last one, opens upon you and in the disan eleptical sheet with darkly lying between loom on either is about six miles haps a mile wide. the wind whistles Still these do not upon the waters sweep of Lake wind becomes so often lashed into A thick growth timber lines the

will soon bring him to a place of

is on the coast incline he can almost

banks of these lakes, but that from about Lake Lindeman is now very rapidly disappearing before the prospectors' ax. Boat building is the most needful industry hereabouts, and it consumes a week to whipsaw out timber to build a scow. This done, however, and the vessel constructed, the trip down to Dawson may be accomplished in about twelve days, making in all about fourteen or fifteen days of travel from the start at Dyea.

This tedious business of boat building completed, we load the craft with our stores and proceed. The current runs about four miles an hour, the wind is with us, and a little paddling sends us pleasantly along. But for the prevalence of rain and fog, much lighter here than on the seaboard, however, the journey would be pleasant enough. Glacial ice is still in sight setting high on the caps of the mountains, and as we approach the narrow

The

stream which joins the Lindeman with Lake Bennett, there comes in sight upon our right, protruding through the straggling pines upon the mountain tops, great masses of dull red rock which give a gloomy tone to the entire landscape.

Lake Bennett is larger than Lindeman, being about twenty-eight miles long, but is upon the average very little wider. In fact, all these lakes are simply levels, where the

Lewis has spread; a few feet deep : when again then the current stretches into a river. finds another level. and there is another have Tagish Lake then a six mile river a long stretch of river, which there is White these there is the last the system, Lebarge, long. While not at scenery along these

same. The shelving banks rise pines, the mountains which flank snow. Along the shores of some Lake, great quantities of fluvial tributary streams, so that the is late spring and as we pass are blooming among the high banks. We keep well in the exhaled from the land, like an swarms of the most vicious mosare not as bad as in some other Koskokwin which

Portage

Between

Sea, I have known vicious that the only tacks is by surroundsmoking fires, and in have been detailed to throughout the night. Yukon is in the same not in such numbers there; but this distheir population and and at other places is by the presence of a of the most effective introduced by nature humans. A green





Lake Bennett.

about midway of Horse Rapids, beyond and largest lake in about thirty-two miles all monotonous, the lakes is much the wooded with a small growth of them barren and seamed with of the lakes, especially Marsh mud have been brought down by shores are deep with muck. It along, wild violets and red roses grass and wild onions on the middle of the stream, for there is

none of them are over

the surface inclines

increases and the lake

and runs on until it

where it again spreads

lake. So it is that we

after a two mile river.

and Marsh Lake, then

irritating consuming miasma, quitoes. Though bad here, they parts of Alaska, and on the flows into the Bering the

Lakes.

them so numerous and escape from their ating the party with our camps there, men maintain these fires Though the lower locality, yet they are nor so blood-thirsty crepancy between voracity on the Yukon abundantly repaired small black gnat, one engines of torture ever to act against the sand fly is also a dis-

tinguished pest on the Yukon flats and appears to annoy the Indians as greatly as the whites.

At White Horse Canyon the river increases its gait to ten miles an hour, plunges through narrow walls of black basalt and runs over sunken boulders in foaming rapids. So swift is the current at this place that the water washing the wall on the right, leaps up high against the rock and curls back and over with a foamy cap like a roller upon the ocean beach. It is dangerous to attempt to navigate these rapids, and foolhardy men who have done so have paid for their folly with their lives. There is a portage on the hill to the left and some one is constructing a cableway over this trail for the aid of travelers and for his own profit. When this is finished and when the hoist on the high lap of the Chilcoot Pass is working, when the ferry boats are



Building Boats at Lake Bennett.

plying the lakes on the mountain and the saw mill at Lake Bennett is buzzing out timber for boats, when all these facilities are in operation the trip from Dyea to Dawson will be plucked of some of its most exquisite terrors and most provoking obstacles.

Rink Rapids with their black stack rocks in the water are easily run, and we approach Fort Selkirk on the left bank of the Yukon, across from the month of the Pelly River, which curves in from the south and east. All there is now left of this old station of the Hudson Bay Company are two or three sooty mud chimneys and some charred timbers. In 1852, it was inhabited by eight men of the company, who with a party of Tagish Indiaus, left it for a day to pursue a hunt. During their absence the place was pounced upon by the Chilkat Klu Klux, at the head of a band of coast natives, who had sworn war against the the whites because they traded with the interior Indians and thereby turned them aside from traffic with the Chilkats. Klu Klux robbed the buildings, then burned them and returned

"In savage glory, home."

It is not related that he or his tribe was ever punished for their outrage, and the expedition seemed to have resulted as he had hoped, for the place was abandoned and the company shortly after withdrew from the territory.

Dark mountains crowd each other on either hand from Fort Selkirk on, and the river widens much since it has absorbed the Pelly. Sea gulls flit in white flocks and maintain a garrulous chattering among the rocks, while the trim martens fly about their cave nests,



The Rink Rapids.

which they dig in the faces of the cliffs, and appear alarmed at our approach. At White River, a great stream making in from the west, the character of the Yukon changes. Heretofore, it has been a clear current, sometimes heightening its crystalline transparency with a tinge of blue. Now, however, on receiving the White, its waters turn muddy and ever after they continue thus. The White is well named; it carries in solution a talc which renders it opaque. Henceforth the pretty graylings which we caught in such abundance



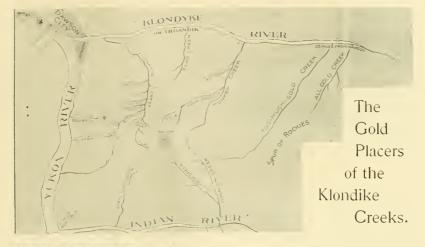
The Portage around White Horse Rapids.

above, we can catch no more; they must be taken with a net for they cannot see the hook. We shall pass the Upper Ramparts as we proceed and find them to be a high bluff on the left of the river, curiously eroded by the action of the weather into many turret-like points, a conspicuous configuration on the river's course. On our way we have observed numerous quartz croppings on the mountain slopes, and as quartz is vein silica, it may be mineralized or not. Occasionally the wires of the telegraph from Vancouver or Seattle tremble with reports brought out by some returning Klondikers that the most sensational finds of gold veins have been made in the Dawson country, but I believe almost all these statements are effects of the emotions. Quartz is abundant in the Klondike hills as it is everywhere throughout the gold scope of Alaska, but up until Christmas, 1897, such assays as had been made of specimens taken from the locality, had proved barren. Taber, the San Francisco photographer, who has photographed extensively over some parts of Alaska, and a few of whose views I print herein, tells however, of a strike recently made on the Lewis, near the Big Salmon River, the assays of which showed seventy-one ounces of silver and two ounces of gold. There will unquestionably be rich and extensive quartz finds made in the Yukon district, but such will not occur until the attention of miners have been largely drawn from placer mining or the present population of the country, which outside of Dawson, is about 3000, receives such accretions that the readily located placer



Winter Quarters at the Mouth of the Pelly

ground becomes taken, and hunting for quartz will be as easy as seeking new placers. As it is the conditions are much against prospecting for veins. The hills are covered with moss to a depth of three feet, which obscures the ledges, makes walking exceedingly difficult and most of the year this moss is solidified by a concrete of ice. But we are at Dawson and there arrives with us a great concourse of people, in unconth boats with smoking stoves, boats wherein they have been confined for the fortnight past. They have floated with us from Lake Lindeman down and now have, for better or worse, reached their destination.





HERE has been some little prospecting done about Hootalinqua and Pelly Rivers, but only colors have been found, and bed rock could not be reached because shafts were sunk in the warm season, and the water coming in at the bottom drove the workers out. On the Stewart a shaft was put down to bed rock, but few traces have rewarded the enterprise. These cursory examinations are by no means convincing that there is not gold in paying quantities yet to be found in the districts thus prospected. Indeed, the prospecting which has been

done in the auriferous districts of Alaska is so slight as compared with the area that no opinion upon the gold-bearing possibilities of localities outside of those upon which development has actually taken place are worth the printing. Nor can it be said that there is any such thing as a gold belt or mother lode in Alaska. This is the opinion of Charles G. Yale, one of the leading mining and mineralogical experts of San Francisco, who has looked the ground carefully over, and nothing that I have seen or heard has changed this idea in my mind. Prior to the discoveries in the Klondike, all the mining had been done on the south side of the Yukon, along the many brooks which flow north and join that stream; along Sixty Mile Creek, Forty Mile Creek, American Creek, on tributaries of Birch Creek, that small river which meets the Yukon upon its westward bend. This is the region in which the mining had been conducted, and on some, particularly on the streams of Birch Creek, excellent results had been obtained. They had built up the adjacent town of Circle City, and in four months of last year the Birch Creek output was about \$300,000. These gold diggings of Alaska have for the past ten years been a safe place for a laborer to go. Working upon his own claim he could always make wages, which are there rated at ten dollars per day, and he could feel that he had constantly a chance of striking some rich deposit, or at least he would be in the district if it should occur that rich strikes were made elsewhere, and he could accordingly be first among the rush to such a place.

If you will refer to the map of Alaska you will observe that the territory of which I



Sixty Mile Post.

speak, while it lies south of the Yukon, and is concave in shape to meet the great bend which the river makes, yet it is a vast stretch of country. In topography it is broken by sporadic monntains, in which the streams head, and interspersed by high plateaus. NotLing like consecutive trend or range can be made of these elevations, and the same remark is applicable to the deposits of gold. We know gold is found in paying quantities on Sixty Mile, and it is found in like abundance at Minook, over two hundred miles below the Porcupine; and farther down the Yukon where the great Tanana makes in, promising

colors have been found. Further down still and on the opposite side, on the Koyukuk, other gool prospects have been discovered and some little gold has been taken ont. But neither of these streams has even been explored, so that nothing is more clear than that gold is scattered, here and there, all over the interior of Alaska, and that, so far as our knowledge now exists, any talk of a definite gold belt is an absurdity. In fact, I have never heard of but one river in Alaska upon which all qualified to speak, seem to agree that there is no gold, and that is the White.

But even in the most mined part of interior Alaska, that south of the Yukon, few of the streams have been investigated or even explored, and a vast unpenetrated domain is there, awaiting prospectors. Upon the north side a very much less area is known. An idea of the Klondike district may be gotten from the following facts:—

The Yukon River, a narrow muddy stream, flows at the foot of a low range of mcss covered hills, which rise upon the north. The country of these hills is exceedingly rugged and wild, the creeks which cut them being deep and narrow. There flow into it out of these hills, and at right angles with the river, the following streams, they being from



First Steamboat Reaching the Site of Dawson After the Klondike Discoveries,

twelve to fifteen miles apart: The Klondike, a blue, shallow and rapid river, then next east Dion Creek, then further east Bryant Creek, then Montana Creek, then Indian River, smaller than the Klondike, then Henderson Creek, and finally and further east, Stewart River, about the size of the Klondike. Such are the streams emptying into the Yukon.

On the Klondike the streams which bear the gold run from the hills upon the east of the river. The first creek is Bonanza, the next Bear, the third Hunker, the fourth Too-Much-Gold, and the fifth All-Gold. These creeks are from twelve to fifteen miles apart, and each empties into the Klondike.

Bonanza also has tributaries. Those which have been prospected and have received names run into it from the south. These are Boulder, Adams, Skookum and Eldorado. Upon Hunker Creek the tributaries, also from the south, are Last Chance and Gold Bottom.

The gold bearing tributaries of Indian River flow out of the same hills that the



Dawson, from Across the Yukon. The Klondike Hills are on the Right of the Picture.

Klondike creeks drain, though upon the opposite or eastern slope. The Klondike creeks flow from the east, the Indian River creeks flow from the west. They are Ophir, Quartz, Sulphur and Dominion, which latter two join as forks and meet the Indian as one creek.

Some prospecting has been done on all the creeks named on Indian River, but it is only in its tentative stages. Thus far the indications are excellent for large deposits. On the Klondike no probing has been done above Hunker Creek; most of the streams are yet to be named; even the length of the Klondike River is not yet known; from the size of the stream at its mouth, however, it is though to be about 250 miles long, and of this length not over 12 miles have been prospected. In the network of creeks I have named there are about 350 linear miles, all of which have been taken up in claims. There is no room for doubt that the gold in the creeks has come out of the adjacent hills, that it has been eroded from veins there by weathering and transported by the vehicle of water into the creek bottoms by whose rock riffles it was caught and held. The glacial theory, that the gold has been conveyed from long and unknown distances by the movement of



Skookum Gulch.- \$250.000 was paid for two claims on this Gulch from which \$30 000 was taken in six weeks.



Claim No. 12, Eldorado Creek.—Mining by shafts sunk to bed rock, the dirt raised in buckets by windlasses, is dumped into a sluice box. Over 20,000 was taken from one of these  $12 \times 16$  feet boxes.

THE GOLD PLACERS OF THE KLONDIKE CREEKS.

ice, is, to my mind, untenable. The country is lacking in glacial evidences, and it is questionable whether they have ever existed here.

El Dorado, which is really an extention of Bonanza Creek, and properly is Bonanza Creek, is the richest of the placers, and this would mean that the veins which have furnished all the the gold were cut by the headwaters of this creek; accordingly, I have thought, that the creeks upon the other side of the divide, which head about where the El



Dorado heads, will contain great quantities of gold. Upon this theory Ophir and Quartz Creeks ought to develope well in the metal.

Bonanza Creek is about twenty-three miles long and has claims upon every five hundred feet of its length, containing in all about two hundred and fifty claims. El Dorado is eight miles long and has sixty-four claims. The gold in each lies at from eighteen to twenty-two feet below the surface, mostly upon a bed rock of shale, the upper measure of which has been split by freezing, and the gold, enveloped in a clay cement, has found its way into the crevices of this rock. It is sprinkled too, quite liberally, through the lower gravels of the deposits, but the upper zones of it do not contain over fifty cents to the panful of dirt. Five or six feet of the surface material is a deposit of vegetable mold, rendering the ravines exceedingly unsuggestive to the miner of their auriferous contents. The entire of this ground is frozen throughout the year, except about three months of summer, when the two feet of surface muck is thawed. This frozen state is favorable for drift mining, for the ground in the shafts and tunnels sustains itself and does not have to be supported by timbering. The material is taken out during the winter season by thawing with fires which are started at night in the workings. When lifted to the surface it is piled up and on the opening of spring, when the water begins to run in the creeks, it is sluiced in boxes



A Street in Circle City.

in the ordinary way.

The gold in these creeks does not lie uniformly across the bottoms, but is in streaks and spots, and some claims, even on El Dorado Creek, are almost barren. But the pay spots are so rich that there can be small doubt that El Dorado will average a yield of \$1,000 per running foot over the whole length of the creek, and that the entire creek will turn out about \$40,000,000. Bonanza Creek will yield at a less rate, and the other creeks, so far as is known, will grade down still smaller. I estimate that the output for the summer of 1898 from the whole district will be about \$12,000,000, and that next year it will be two or three times that quantity.

Pans of dirt which wash out \$800 do not prove the richness of a district, any more than those pans which reveal merely colors; but, upon the whole, there is no doubt that the Klondike Creeks are enormously rich. Of late it has become common to talk down the locality and we hear statements that it does not amount to very much after all. But these derogations arise from a movement among the big claim owners to have the Canadian government repeal the ten per cent royalty act, npon the ground that the claims cannot afford to pay it. It has seemed to me that the act was just, for surely the land belonging to the government, it is entitled to some revenue from it, and when it is to be considered that this will be spent in affording public facilities to the people there it might be cheerfully yielded.

The Canadian mining laws are made for the people, those of the United States promote monopoly. On Canadian ground one man may take up only 200 feet of a creek bed, he can locate but one claim in a district, and if he leaves the claim for seventy-two hours he forfeits his rights to it. On the American side he may stake off 1500 feet claims, and he may have as many of them as he pleases. It costs him nothing to hold them for an entire year, and his title is renewed if he has exerted \$100 of labor upon each of them. He may, therefore, seize a whole creek and all its branches. Under this arrangement a few men would have owned all the Klondike placers, and the balance of the 3000 who are now working in them would be simply laborers, and wages would not be \$1.50 an hour either. Two hundred feet of ground of average richness will afford any man a moderate fortune, and the limited gold lands may be shared by thousands, instead of by hundreds.

On the left bank of the Klondike, at the confluence of the Yukon, is the town of Klondike, and on the right bank is Dawson. It is an unlovely spot, built on a muck marsh, its establishments chiefly comprising saloons. Its structures are tents or miserable log shacks, the largest building in the town being a dance hall. Gold is abundant about town, all in dust and nugget form, but food is correspondingly high A cup of coffee costs fifty cents and a poor meal, \$2.50. Some were pinched by hunger during the past winter, but, like the gold in the creeks, some had abundance and to spare, while others were nearly without. Equally divided there would have been plenty for all. We shall not tarry here, it is an unpleasant place, so again on the tawny water, we are en route.



In Comfortable Winter Quarters on the Porcupine: Thermometer Seventy two Degrees Below Zero.

### The Great Yukon

FROM THE ...

#### Porcupine to the Delta.



Grubstack at Rampart City.

ERHAPS an oomeak, one of those long boats built by the Yukon Indians, covered with walrus hide two inches thick, and capable of carrying twelve persons, would be as comfortable a vessel in which

to navigate the great Yukon as any. For from Dawson some hundreds of miles below, the river is very shallow, and last winter some of the lightest draft steamers, drawing but three feet of water, were unable to ascend higher than Circle City. The river, encrusted with ice during eight

months of the year, opens in June, first breaking at its headwaters, where the streams between the lakes rarely freeze. A month later the lower Yukon melts and though the ice blocks jam and pile here for a while, tearing down islands and building others, yet they finally succumb to the increasing heat of the recurring days, and presently the great sluggish, muddy stream is again serene and fluid and it spreads over broad lengths in its lazy way, so that at parts you may not see its farthest shore.

The people of the old Hudson Bay Company thought the Yukon continued north and emptied into the Arctic Ocean; and the earliest maps mark the river so trending. The company's men accordingly, carried their goods overland from the Mackenzie River to Vancouver, and it required seven years to accomplish the trip. They did not know of that remarkable turn which the Yukon makes at its confluence with the Porcupine. Above and below this junction the river is full of small islands, many of them mere deposits of alluvium accumulated where driftwood has caught in the water, and along the river banks we may see trees lying over, their tops in the water yet their roots still in the soil.

The current cuts beneath them and presently they are separated from the bank and carried down the stream to furnish firewood, perhaps, to the inhabitants of St. Michael's Island, over a thousand miles below. We shall pass numerous Indian villages as we proceed, and we shall discover that the natives of the Yukon district are the lowest in their scale of living of all the Eskimos. If we go ashore, we may stumble into some pit three or four feet deep, in which there is a revolting mess of carrion blubber, covered with a scum of green slime,



Lake of Petroleum Oil North of the Yukon.



Summer on the Porcupine

and this is a food cache of a denizen. As we near the mouth of the river, we come upon the strangest of all the strange wonders of Alaska—the Yukon Delta. It is a vast moss marsh extending two hundred miles up the river and fronting the Bering Sea with a face three hundred miles in width. Its surface is covered with green or gray moss which grows upon a pavement of ice a few feet beneath the surface. This ice concrete stretches over a large district of the Yukon and

adjacent rivers. At some places the cross streams which cut it show it to be a hundred feet thick and their waters are a black ooze drained from the decaying roots of the moss. On the Koowak, which empties into Kotzebue Sonnd—above that strange head of land on the end of which is Cape Prince of Wales—on that stream the ice cliffs are one hundred and fifty feet high, and in many places they are filled with the tusks and bones of the extinct mammoth. Gold in considerable quantities has been found on the streams of this river and several parties are, as I write, fitting out in San Francisco to prospect them in spring.

This vast deltoid plain, cut by the many shallow stringers of the river's mouth, is in the hot summer when the thermometer is a hundred degrees, a wide field of color. Immumerable yellow and purple flowers clothe it and above them waft the gaudily colored wings of the butterflies. And off to the north, bending on to the Bering Sea, runs the only navigable channel of the Yukon. It carries four feet and a half of water at best, and vessels exceeding that draft cannot enter it. It moves with its deltoid



Breaking Up of the Ice on the Porcupine near its Confluence with the Yukon.

detritus on to sea, with whose waters it mingles its mud. It has marvelously shoaled this sea so that vessels cannot approach the flat, and when you are opposite this place, yet out of sight of land, you may still have three fathoms of water.

And now we are at St. Michaels' Island on which is the town where the Yukon steamers stop and vessels find a harbor. It is an ancient Russian kakat with a Greek Church and United States government buildings, a customs' officer, and a few soldiers. It is a busy place in summer, though, during that brief period when the Yukon is open to traffic and the whalers are coming down out of the northern ocean.



Building an Oomeak.

As we floated down the Yukon we passed numerous villages whose names appear upon the maps in formidable length and intricacy. When we neared them, however, we found them to be far inferior in character to what the names might, to the unknowing, have suggested. We, who were struck with the Muscovite guttural of "Andreafsky," "Nowikakat," "Razboinitskaya" or "Kinegnagmiut," and who had our fancies turned to behold spires and burnished domes like we had seen at Moscow, felt a sense akin to shock when



Nowikakat-An Eskimo Settlement on the Lower Yukon.

there hove in sight upon the river's bank a settlement to which such a name belonged. It was Nowikakat. No habitation could be more primitive than this we here beheld. A mere collection of sticks taken from the river's driftwood, were piled together to serve some rude form of shelter. Such houses are, however, the abodes of summer. In winter



On the Lower Yukon near the Sea.

the chinks are stuffed with moss, and if the ground is solid a burrow is made beneath the surface. Into this all crawl; the heat of the bodies of the occupants and the numerous tapers burning oil raise the temperature to an agreeable degree, and when bed time comes the entire family divests all clothing and retires together between skins, the apparel of each



Driftwood on the Banks of the Lower Yukon.

member being used for the owner's pillow. In this manner, though the cold without may be fathoms below zero, yet the sleepers repose comfortably, for each contributes warmth to the other.

Transportation by land throughout this country is at present done by dogs. They are even used by potato growers near the Klondike to drag the plow; but I opine the time is not long when their use will be displaced by that of the reindeer. The best sled dogs are the St. Bernards, but even

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St. Michaels

of these it requires five to hanl a sled containing seven hundred and fifty pounds and though they are fed but once a day, at evening, yet they consume each three pounds dry weight of rice and bacon and this is expensive, and must be carried on the pack. The reindeer draws more, drags faster and will paw through the snow for its food, which even if such is carried, is merely moss and inexpensive.

And now my reader, such is our journey over this mighty and marvelons region, and we have come to part. This land which we call Alaska, is with its islands, upwards of five hundred and eighty thousand square miles in area, or as large as all that part of the United States lying east of the Mississippi. We have traversed much of it on our cursory trip, but much remains unseen. We could have entered the interior by other routes than that selected; by the Stickeen River from Fort Wrangell, one hundred and fifty miles to Telegraph Creek, over one hundred and fifty miles of portage where a railroad is now building, and over Teslintoo Lake into the Hootalinqua, thence into the Lewis below White Horse Rapids; or we could have come over the Dalton trail, across the pass of the Chilkats arising from the village of Klukwan, or we could have followed the Taku River from its outlet, then a trail of forty miles to the Tesleen Lake and so into the Lewis; but I have chosen to take you by the route most traversed, over the Chilcoot Pass where even now so many persons are struggling beneath their packs hopefully toward the land of gold.

And now as the sun is sinking, let us look again upon that supreme of wonders of the north. In winter only his glare is daily for a few hours seen upon the horizon, and when he returns in springtime his keen reflection upon the snow drives even the natives to protect their eyes with tiny punctured goggles of wood; and here in the summer his limb but touches the horizon and he ascends. It is midnight and her hangs there a great bloody ball, like a frightfully congested moon, as though his white orb were being cooled in the polar ocean. We look upon him for the last time for the door of our stateroom closes and the engine bell jingles away for San Francisco.



The Sun at Midnight off Point Barrow, June 16, 1897.

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